

CLAIMS

1. A radioprotective material comprising at least one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives.

5           2. A radioprotective material comprising at least one member selected from the group consisting of collagens and their derivatives.

          3. A radioprotective material according to claim 1, which provides protection from at least one member  
10 selected from the group consisting of cosmic rays, radio waves, electromagnetic waves, infrared rays, visible light, ultraviolet rays, alpha rays, beta rays, proton beams, baryon beams, X-rays, gamma rays, electron beams and neutron beams.

15           4. A radioprotective material according to claim 1, which provides protection from at least one member selected from the group consisting of cosmic rays, electromagnetic waves, Ultraviolet-A, Ultraviolet-B, alpha rays, beta rays, proton beams, baryon beams, X-rays, gamma  
20 rays, electron beams and neutron beams.

          5. A radioprotective product comprising a radioprotective material according to claim 1.

          6. A radioprotective product according to claim 5, comprising 0.05 wt.% to 40 wt.% in total of at least  
25 one member selected from the group consisting of collagens,

keratins, silk fibroins and their derivatives.

7. A radioprotective product according to claim  
6, which is at least one member selected from the group  
consisting of radioprotective plastic product,  
5 radioprotective film, radioprotective sheet,  
radioprotective coating agent, radioprotective cosmetic  
product, radioprotective fiber and radioprotective  
preparation.

8. A radiation-resistant medical or experimental  
10 material, comprising a radioprotective material according  
to claim 1.

9. A radiation-resistant medical or experimental  
material, comprising a radioprotective product according  
to claim 5.

15 10. Use as a radioprotective material of at  
least one member selected from the group consisting of  
collagens, keratins, silk fibroins and their derivatives.

11. Use for the production of a radioprotective  
material of at least one member selected from the group  
20 consisting of collagens, keratins, silk fibroins and their  
derivatives .

12. Use for the production of a radioprotective  
product of at least one member selected from the group  
consisting of collagens, keratins, silk fibroins and their  
25 derivatives.

13. A method for blocking or reducing the adverse effects of radiation on a subject, the method comprising protecting a subject with a radioprotective material according to claim 1.

5           14. A method according to claim 13, wherein at least one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives is administered to, mixed with, coated on or immobilized on a subject.

10           15. A method according to claim 13, wherein a product comprising at least one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives is used to protect a subject.

15           16. A method according to claim 15, wherein a product comprising at least one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives is placed over, applied to or administered to a subject.

20           17. A method according to claim 13, wherein at least one member selected from the group consisting of collagens, keratins, silk fibroins and their derivatives is used in such a manner that the at least one member is present inside a subject or inside a surface layer of a subject in a total amount of 0.05 wt.% to 40 wt.%.